

Amendments to the Specification

Please replace the paragraph beginning on page 7, line 27 with the following amended paragraph.

The computational unit 40 can display the position and/or the spatial angle in the orthopaedically defined directions of abduction, adduction, flexion, extension, internal and external rotation and changes in leg length. It is also possible to calculate the angle between a previously defined axis 42 through the joint head 12 and a previously defined axis 44 through the joint cavity 16. For calculating the angle, it is possible, for example, to fall back on data stored in a data base 50, which includes, for example, information on the geometry of the joint head 12, the joint cavity 16, the fixing position of the reference stars 20 or other information. Furthermore, reference values for a series of measurements performed can be stored in the data base 50, where these values can be used for comparison with subsequent measurements. A force applying device 56, such as a robot 60 or a manually-operable force applying device, and a force measuring device 62 58 (both in communication with the computational unit 40) can be employed for applying forces in defined directions to the joint as well as measuring respective applied forces.